



NMMSS International Reporting

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Requirements for NMMSS to generated International Reports

- I - Agreements for Peaceful Nuclear Cooperation
- II - US/IAEA Safeguards Agreement
- III - US Voluntary Reporting to the IAEA
- IV - US/IAEA Safeguards Agreement for the Caribbean Territories



I - Agreements for Peaceful Nuclear Cooperation

- The United States currently has 23 Agreements for Peaceful Nuclear Cooperation in force

Argentina,	Australia,	Brazil,	Canada,
P. R. China,	Egypt,	EURATOM,	India,
Indonesia,	Japan,	Kazakhstan,	Morocco,
Korea,	Norway,	Russia,	South Africa,
Switzerland,	Turkey,	Ukraine,	Viet Nam,
United Arab Emirates,	Taiwan (through non-government channels),		
International Atomic Energy Agency			



I - Agreements for Peaceful Nuclear Cooperation, continued

- The United States also has two additional Agreements in force that require the tracking of nuclear material within the USA
 - DOE/Minatom HEU down blending Agreement
 - Washington Agreement (for import and use of centrifuge enrichment equipment)



I - Agreements for Peaceful Nuclear Cooperation, continued

- To support the U.S. implementation of the Agreements NMMSS is tasked to prepare a variety of routine Reports
 - Weekly reports documenting some of the Foreign Obligated nuclear material exported by and imported by the U.S.
 - Monthly reports documenting the Foreign Obligated nuclear material exported by and imported by the U.S.
 - Year-end reports documenting the quantity of Foreign Obligated nuclear material residing within the U.S.



II - US/IAEA Safeguards Agreement

- Overview
- The U.S. provides a list of facilities within the U.S. that are not of national security significant and thus eligible for selection by the International Atomic Energy Agency (IAEA)
- When a facility is selected, the either implement routine IAEA safeguards on all source and special nuclear material at the facility, or the IAEA may request that the facility provide facility information and nuclear material processing information to the IAEA



II - US/IAEA Safeguards Agreement, continued

- A facility selected by the IAEA reports all nuclear material information to NMMSS. The information includes:
 - Nuclear material receipts, shipments, physical inventory listing, material balance report, concise notes, inventory adjustments
 - IAEA codes established and used to document: material description codes, key measurement points (for flow & inventory), measurement basis, material type, inventory change codes
 - IAEA has recently started requiring some facilities to report an isotope weight that varies from domestic regulations



II - US/IAEA Safeguards Agreement, continued

- To support the U.S. implementation of the US/IAEA Safeguards Agreement, NMMSS is tasked to prepare a these routine reports
 - **Inventory Change Report:** monthly report of each selected facility documenting receipts, shipments, inventory adjustments
 - **Physical Inventory listing Report:** yearly listing of all nuclear items present when the inventory is performed by a selected facility
 - **Material Balance Report:** yearly report recapping the beginning inventory, inventory changes grouped by inventory change codes, ending inventory, rounding and inventory difference for a selected facility
 - **Import and Export Report:** monthly report documenting all U.S. imports and U.S. exports, not involving a selected facility
 - **Concise Note Report:** submitted with any of the above reports



II - US/IAEA Safeguards Agreement, continued

- Currently, the IAEA is receiving routine NMMSS reports for:
 - one storage facility, selected for the application of routine IAEA safeguards
 - three low-enriched uranium fuel fabrication facilities, selected for nuclear material reporting
 - one uranium enrichment facility, selected for nuclear material reporting
 - all U.S. imports and exports of source material and special nuclear material by any facility other than the above five selected facilities



III - US Voluntary Reporting to the IAEA

- Annual Civilian Plutonium holdings
 - NMMSS prepares a year end report documenting total plutonium outside of Licensees reactor cores
 - This information is combined with DOE generated report of plutonium that is not national security material into USG yearly report published in INFCIRC/549
- Reporting more nuclear material than required by US/IAEA Safeguards Agreement
 - The Agreement requires reporting imports/exports that equal or exceed one effective kilogram (i.e., 10,000 kilograms or more of natural uranium)
 - NMMSS reports imports/exports of 1 kilogram or more of natural uranium



IV - US/IAEA Safeguards Agreement for the Caribbean Territories

- Applies to the U.S. Caribbean Territories
 - Puerto Rico
 - U.S. Virgin Islands
- NMMSS will provide first reports to the IAEA this fall
 - Initial Physical Inventory Listing of all source and special nuclear material located within the U.S. Caribbean Territories
- NMMSS will provide yearly reports to the IAEA
 - Physical Inventory Listing of all source and special nuclear material located within the U.S. Caribbean Territories
 - Inventory Change Report documenting all imports to, and exports from the U.S. Caribbean Territories of source and special nuclear material
 - Concise Note providing information on each location that possess and uses source and special nuclear material within the U.S. Caribbean Territories



Summary

- Between now and the 2018 NMMSS Users and Training Meeting, NMMSS will prepare approximately
 - 100 reports for the IAEA
 - 516 reports for other Governments